```
          541 AGCCATGTGATCCTACACACGTACTGTGAGCACATGGCTGTGGTGAAGCTGGCCTGTGGA 600
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
          741 AGCCATGTGATCCTACACACGTACTGTGAGCACATGGCTGTGGTGAAGCTGGCCTGTGGA 800

          601 GACACCAGGCCTAACCGTGTGTATGGGCTGACAGCTGCACTGTTGGTCATTGGGGTTGAC 660
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
          801 GACACCAGGCCTAACCGTGTGTATGGGCTGACAGCTGCACTGTTGGTCATTGGGGTTGAC 860

          661 TTGTTTTGCATTGGTCTCTCCTATGCCCTAATTGCACAAGCTGTCCTTCGCCTCTCATCC 720
              |||||||||||||||||||||||||||||| ||||||||||||||||||||||||||||||
          861 TTGTTTTGCATTGGTCTCTCCTATGCCCTAAGTGCACAAGCTGTCCTTCGCCTCTCATCC 920

          721 CATGAAGCTCGGTCCAAGGCCCTAGGGACCTGTGGTTCCCATGTCTGTGTCATCCTCATC 780
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
          921 CATGAAGCTCGGTCCAAGGCCCTAGGGACCTGTGGTTCCCATGTCTGTGTCATCCTCATC 980

          781 TCTTATACACCAGCCCTCTTCTCCTTTTTTACACACCGCTTTGGCCATCACGTTCCAGTC 840
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
          981 TCTTATACACCAGCCCTCTTCTCCTTTTTTACACACCGCTTTGGCCATCACGTTCCAGTC 1040

          841 CATATTCACATTCTTTTGGCCAATGTTTATCTGCTTTTGCCACCTGCTCTTAATCCTGTG 900
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
         1041 CATATTCACATTCTTTTGGCCAATGTTTATCTGCTTTTGCCACCTGCTCTTAATCCTGTG 1100

          901 GTATATGGAGTTAAGACCAAACAGATCCGTAAAAGAGTTGTCAGGGTGTTTCAAAGTGGG 960
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
         1101 GTATATGGAGTTAAGACCAAACAGATCCGTAAAAGAGTTGTCAGGGTGTTTCAAAGTGGG 1160

          961 CAGGGAATGGGCATCAAGGCATCTGAG 987
              ||||||||||||||||||||||||||||
         1161 CAGGGAATGGGCATCAAGGCATCTGAG 1187
```

RESULT 8
AAH31850
ID AAH31850 standard; DNA; 963 BP.
XX
AC AAH31850;
XX
DT 30-JUL-2001 (first entry)
XX
DE Human olfactory receptor polynucleotide, SEQ ID NO: 423.
XX
KW Human; olfactory receptor; OR; primary scent determination;
KW secondary scent determination; polypeptide library; odour receptor;
KW scent profile; scent fingerprint; scent representation; ds.
XX
OS Homo sapiens.
XX
PN WO200127158-A2.
XX
PD 19-APR-2001.
XX
PF 06-OCT-2000; 2000WO-US027582.
XX
PR 08-OCT-1999; 99US-0158615P.
PR 24-FEB-2000; 2000US-0184809P.
XX
PA (DIGI-) DIGISCENTS.
PA (YEDA) YEDA RES & DEV CO LTD.
XX
PI Bellenson J, Smith D, Lancet D, Glusman G, Fuchs T, Yanai I;
XX
DR WPI; 2001-290713/30.
XX
PT New polynucleotides which encode polypeptides involved in olfactory
PT sensation for identifying olfactory agonists and antagonists.
XX
PS Claim 8; Page 349; 1857pp; English.
XX
CC The present sequence is one of a number of isolated polynucleotides which
CC encode polypeptides involved in olfactory sensation. The polynucleotides
CC can be used in screening for olfactory agonists and antagonists. The
CC methods allow for the determination of primary scents and the
CC identification of the odour receptors used to detect these primary
CC scents. The methods also enable determination of secondary scents and the
CC identification of combinations of odour receptors that are involved in
CC detecting such secondary scents. This enables the construction of a scent
CC representation (also called a scent fingerprint or scent profile), which
CC may be used to re-create and edit scents. Libraries of olfactory
CC receptors are useful for determining the interaction pattern of a
CC composition with the receptors, and can be used for determining
CC differences in the olfactory faculties of different individuals
XX
SQ Sequence 963 BP; 181 A; 276 C; 216 G; 290 T; 0 U; 0 Other;

Query Match 96.9%; Score 956.6; DB 4; Length 963;
Best Local Similarity 99.6%; Pred. No. 4.1e-300;
Matches 959; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

```
Qy          25 ATGGAATCTCCTCATCACACTGATGTTGACCCTTCTGTCTTCTTCCTCCTGGGCATCCCA 84
               ||||||||||| ||||||||||||||||||||||||||||||||||||||||||||||||
Db           1 ATGGAATCTCCTAATCACACTGATGTTGACCCTTCTGTCTTCTTCCTCCTGGGCATCCCA 60

Qy          85 GGTCTGGAACAATTTCATTTGTGGCTCTCACTCCCTGTGTGTGGCTTAGGCACAGCCACA 144
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          61 GGTCTGGAACAATTTCATTTGTGGCTCTCACTCCCTGTGTGTGGCTTAGGCACAGCCACA 120

Qy         145 ATTGTGGGCAATATAACTATTCTGGTTGTTGTTGCCACTGAACCAGTCTTGCACAAGCCT 204
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         121 ATTGTGGGCAATATAACTATTCTGGTTGTTGTTGCCACTGAACCAGTCTTGCACAAGCCT 180

Qy         205 GTGTACCTTTTTCTGTGCATGCTCTCAACCATCGACTTGGCTGCCTCTGTCTCCACAGTT 264
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         181 GTGTACCTTTTTCTGTGCATGCTCTCAACCATCGACTTGGCTGCCTCTGTCTCCACAGTT 240

Qy         265 CCCAAGCTACTGGCTATCTTCTGGTGTGGAGCCGGACATATATCTGCCTCTGCCTGCCTG 324
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         241 CCCAAGCTACTGGCTATCTTCTGGTGTGGAGCCGGACATATATCTGCCTCTGCCTGCCTG 300

Qy         325 GCACATATGTTCTTCATTCATGCCTTCTGCATGATGGAGTCCACTGTGCTACTGGCCATG 384
               ||||| ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         301 GCACAGATGTTCTTCATTCATGCCTTCTGCATGATGGAGTCCACTGTGCTACTGGCCATG 360

Qy         385 GCCTTTGATCGCTACGTGGCCATCTGCCACCCACTCCGCTATGCCACAATCCTCACTGAC 444
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         361 GCCTTTGATCGCTACGTGGCCATCTGCCACCCACTCCGCTATGCCACAATCCTCACTGAC 420

Qy         445 ACCATCATTGCCCACATAGGGGTGGCAGCTGTAGTGCGAGGCTCCCTGCTCATGCTCCCA 504
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         421 ACCATCATTGCCCACATAGGGGTGGCAGCTGTAGTGCGAGGCTCCCTGCTCATGCTCCCA 480

Qy         505 TGTCCCTTCTTTATTGGGCGTTTGAACTTCTGCCAAAGCCATGTGATCCTACACACGTAC 564
               ||||||||| ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         481 TGTCCCTTCCTTATTGGGCGTTTGAACTTCTGCCAAAGCCATGTGATCCTACACACGTAC 540

Qy         565 TGTGAGCACATGGCTGTGGTGAAGCTGGCCTGTGGAGACACCAGGCCTAACCGTGTGTAT 624
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         541 TGTGAGCACATGGCTGTGGTGAAGCTGGCCTGTGGAGACACCAGGCCTAACCGTGTGTAT 600

Qy         625 GGGCTGACAGCTGCACTGTTGGTCATTGGGGTTGACTTGTTTTGCATTGGTCTCTCCTAT 684
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         601 GGGCTGACAGCTGCACTGTTGGTCATTGGGGTTGACTTGTTTTGCATTGGTCTCTCCTAT 660

Qy         685 GCCCTAATTGCACAAGCTGTCCTTCGCCTCTCATCCCATGAAGCTCGGTCCAAGGCCCTA 744
               ||||||| ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         661 GCCCTAAGTGCACAAGCTGTCCTTCGCCTCTCATCCCATGAAGCTCGGTCCAAGGCCCTA 720

Qy         745 GGGACCTGTGGTTCCCATGTCTGTGTCATCCTCATCTCTTATACACCAGCCCTCTTCTCC 804
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         721 GGGACCTGTGGTTCCCATGTCTGTGTCATCCTCATCTCTTATACACCAGCCCTCTTCTCC 780

Qy         805 TTTTTTACACACCGCTTTGGCCATCACGTTCCAGTCCATATTCACATTCTTTTGGCCAAT 864
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         781 TTTTTTACACACCGCTTTGGCCATCACGTTCCAGTCCATATTCACATTCTTTTGGCCAAT 840
```

```
Qy        865 GTTTATCTGCTTTTGCCACCTGCTCTTAATCCTGTGGTATATGGAGTTAAGACCAAACAG 924
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        841 GTTTATCTGCTTTTGCCACCTGCTCTTAATCCTGTGGTATATGGAGTTAAGACCAAACAG 900

Qy        925 ATCCGTAAAAGAGTTGTCAGGGTGTTTCAAAGTGGGCAGGGAATGGGCATCAAGGCATCT 984
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        901 ATCCGTAAAAGAGTTGTCAGGGTGTTTCAAAGTGGGCAGGGAATGGGCATCAAGGCATCT 960

Qy        985 GAG 987
              |||
Db        961 GAG 963


RESULT 9
ABK16633
ID   ABK16633 standard; cDNA; 966 BP.
XX
AC   ABK16633;
XX
DT   14-MAR-2002  (first entry)
XX
DE   Human G-coupled receptor (GCREC) cDNA, Seq ID No 42.
XX
KW   Human; cytostatic; neuroprotective; immunosuppressant; nootropic;
KW   anti-inflammatory; anti-viral; gastrointestinal; cardiovascular;
KW   cerebroprotective; G-coupled receptor; cell proliferative disease;
KW   lymphoma; leukaemia; breast cancer; cirrhosis; neurological disorder;
KW   stroke; Alzheimer's disease; multiple sclerosis; mental retardation;
KW   cardiovascular disease; atherosclerosis; angina pectoris; indigestion;
KW   congestive heart failure; gastrointestinal disorder; dysphagia; AIDS;
KW   gastritis; autoimmune disorder; inflammatory disorder; Crohn's disease;
KW   systemic lupus erythematosus; metabolic disorder; diabetes; obesity;
KW   viral infection; herpesvirus; parvovirus;
KW   acquired immune deficiency syndrome; ss.
XX
OS   Homo sapiens.
XX
PN   WO200190359-A2.
XX
PD   29-NOV-2001.
XX
PF   22-MAY-2001; 2001WO-US016833.
XX
PR   22-MAY-2000; 2000US-0206222P.
PR   25-MAY-2000; 2000US-0207476P.
PR   02-JUN-2000; 2000US-0208834P.
PR   02-JUN-2000; 2000US-0208861P.
PR   07-JUN-2000; 2000US-0209868P.
XX
PA   (INCY-) INCYTE GENOMICS INC.
XX
PI   Patterson C,  Tribouley CM,  Yao MG,  Griffin JA,  Thornton M,  Lu Y;
PI   Kallick DA,  Gandhi AR,  Au-Young J;
XX
DR   WPI; 2002-106199/14.
DR   P-PSDB; AAU80511.
XX
PT   New G-protein coupled receptors useful for treating or preventing cell
PT   proliferative (e.g. leukemia), neurological (e.g. stroke), cardiovascular
PT   or autoimmune/inflammatory disorders.
XX
PS   Claim 5; Page 146; 148pp; English.
XX
CC   The invention relates to a novel human G-coupled receptor (I). (I) and
CC   its corresponding polynucleotides are useful for diagnosing, treating or
CC   preventing cell proliferative diseases (e.g. lymphoma, leukaemia, breast
CC   cancer or cirrhosis), neurological disorders (e.g. stroke, Alzheimer's
CC   disease, multiple sclerosis or mental retardation), cardiovascular
CC   diseases (e.g. atherosclerosis, angina pectoris or congestive heart
CC   failure), gastrointestinal disorders (e.g. dysphagia, indigestion or
CC   gastritis), autoimmune/inflammatory disorders (e.g. AIDS, Crohn's disease
CC   or systemic lupus erythematosus) or metabolic disorders (e.g. diabetes or
CC   obesity), or viral infections (e.g. infection by herpesvirus or
CC   parvovirus). ABK16615-ABK16637 represent novel human G-coupled receptor
CC   coding sequences of the invention
XX
SQ   Sequence 966 BP; 182 A; 276 C; 217 G; 291 T; 0 U; 0 Other;

  Query Match             96.9%;  Score 956.6;  DB 6;  Length 966;
  Best Local Similarity   99.6%;  Pred. No. 4.1e-300;
  Matches  959;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy         25 ATGGAATCTCCTCATCACACTGATGTTGACCCTTCTGTCTTCTTCCTCCTGGGCATCCCA 84
              |||||||||||| ||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ATGGAATCTCCTAATCACACTGATGTTGACCCTTCTGTCTTCTTCCTCCTGGGCATCCCA 60

Qy         85 GGTCTGGAACAATTTCATTTGTGGCTCTCACTCCCTGTGTGTGGCTTAGGCACAGCCACA 144
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 GGTCTGGAACAATTTCATTTGTGGCTCTCACTCCCTGTGTGTGGCTTAGGCACAGCCACA 120

Qy        145 ATTGTGGGCAATATAACTATTCTGGTTGTTGTTGCCACTGAACCAGTCTTGCACAAGCCT 204
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ATTGTGGGCAATATAACTATTCTGGTTGTTGTTGCCACTGAACCAGTCTTGCACAAGCCT 180

Qy        205 GTGTACCTTTTTCTGTGCATGCTCTCAACCATCGACTTGGCTGCCTCTGTCTCCACAGTT 264
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 GTGTACCTTTTTCTGTGCATGCTCTCAACCATCGACTTGGCTGCCTCTGTCTCCACAGTT 240

Qy        265 CCCAAGCTACTGGCTATCTTCTGGTGTGGAGCCGGACATATATCTGCCTCTGCCTGCCTG 324
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 CCCAAGCTACTGGCTATCTTCTGGTGTGGAGCCGGACATATATCTGCCTCTGCCTGCCTG 300

Qy        325 GCACATATGTTCTTCATTCATGCCTTCTGCATGATGGAGTCCACTGTGCTACTGGCCATG 384
              ||||| ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 GCACAGATGTTCTTCATTCATGCCTTCTGCATGATGGAGTCCACTGTGCTACTGGCCATG 360

Qy        385 GCCTTTGATCGCTACGTGGCCATCTGCCACCCACTCCGCTATGCCACAATCCTCACTGAC 444
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 GCCTTTGATCGCTACGTGGCCATCTGCCACCCACTCCGCTATGCCACAATCCTCACTGAC 420

Qy        445 ACCATCATTGCCCACATAGGGGTGGCAGCTGTAGTGCGAGGCTCCCTGCTCATGCTCCCA 504
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 ACCATCATTGCCCACATAGGGGTGGCAGCTGTAGTGCGAGGCTCCCTGCTCATGCTCCCA 480

Qy        505 TGTCCCTTCTTTATTGGGCGTTTGAACTTCTGCCAAAGCCATGTGATCCTACACACGTAC 564
              |||||||| ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        481 TGTCCCTTCCTTATTGGGCGTTTGAACTTCTGCCAAAGCCATGTGATCCTACACACGTAC 540

Qy        565 TGTGAGCACATGGCTGTGGTGAAGCTGGCCTGTGGAGACACCAGGCCTAACCGTGTGTAT 624
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        541 TGTGAGCACATGGCTGTGGTGAAGCTGGCCTGTGGAGACACCAGGCCTAACCGTGTGTAT 600

Qy        625 GGGCTGACAGCTGCACTGTTGGTCATTGGGGTTGACTTGTTTTGCATTGGTCTCTCCTAT 684
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        601 GGGCTGACAGCTGCACTGTTGGTCATTGGGGTTGACTTGTTTTGCATTGGTCTCTCCTAT 660

Qy        685 GCCCTAATTGCACAAGCTGTCCTTCGCCTCTCATCCCATGAAGCTCGGTCCAAGGCCCTA 744
              ||||||| ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        661 GCCCTAAGTGCACAAGCTGTCCTTCGCCTCTCATCCCATGAAGCTCGGTCCAAGGCCCTA 720

Qy        745 GGGACCTGTGGTTCCCATGTCTGTGTCATCCTCATCTCTTATACACCAGCCCTCTTCTCC 804
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        721 GGGACCTGTGGTTCCCATGTCTGTGTCATCCTCATCTCTTATACACCAGCCCTCTTCTCC 780

Qy        805 TTTTTTACACACCGCTTTGGCCATCACGTTCCAGTCCATATTCACATTCTTTTGGCCAAT 864
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        781 TTTTTTACACACCGCTTTGGCCATCACGTTCCAGTCCATATTCACATTCTTTTGGCCAAT 840

Qy        865 GTTTATCTGCTTTTGCCACCTGCTCTTAATCCTGTGGTATATGGAGTTAAGACCAAACAG 924
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        841 GTTTATCTGCTTTTGCCACCTGCTCTTAATCCTGTGGTATATGGAGTTAAGACCAAACAG 900

Qy        925 ATCCGTAAAAGAGTTGTCAGGGTGTTTCAAAGTGGGCAGGGAATGGGCATCAAGGCATCT 984
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        901 ATCCGTAAAAGAGTTGTCAGGGTGTTTCAAAGTGGGCAGGGAATGGGCATCAAGGCATCT 960
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Qy        985 GAG 987
              |||
Db        961 GAG 963
```

RESULT 10
ABK68612
ID ABK68612 standard; DNA; 966 BP.
XX
AC ABK68612;
XX
DT 02-JUL-2002 (first entry)
XX
DE Human DNA for olfactory and pheromone G protein-coupled receptor #212.
XX
KW Human; ds; gene; olfactory and pheromone G protein coupled receptor;
KW GPCR; tranquilizer; antidepressant; neuroleptic; endocrine; anabolic;
KW anorectic; taste; fragrance; food additive; cosmetic; cell migration;
KW sterility; psychotic disorder; neurological disorder; anxiety;
KW schizophrenia; manic depression; depression; axonal growth;
KW menstrual cycle; appetite sexual motivation; sexual attraction;
KW aggression.
XX
OS Homo sapiens.
XX
PN WO200224726-A2.
XX
PD 28-MAR-2002.
XX
PF 21-SEP-2001; 2001WO-BE000162.
XX
PR 22-SEP-2000; 2000EP-00870211.
XX
PA (CHEM-) CHEMCOM SA.
XX
PI Veithen A;
XX
DR WPI; 2002-330013/36.
DR P-PSDB; AAU95725.
XX
PT Novel pheromone G-protein coupled receptor and receptor-derived agonists,
PT antagonists or inhibitors useful in food or cosmetic products or in the
PT treatment or prevention of neurological disorders such as anxiety and
PT schizophrenia.
XX
PS Disclosure; Page 646-647; 833pp; English.
XX
CC The invention relates to olfactory and Pheromone G-protein coupled
CC receptor (GPCR) or a protein 95% identical to the GPCR, a specific active
CC portion and its encoding polynucleotide. Also included are an agonist,
CC antagonist or inhibitor of the GPCR or the polynucleotide, a vector
CC comprising the polynucleotide, a cell transformed by the vector, a non-
CC human mammal comprising a partial or total deletion of the polynucleotide
CC encoding the receptor and screening (detection and possibly, recovering)
CC of compounds which are known or not known to be agonist, antagonists or
CC inhibitors of natural compounds to the GPCR. The receptor-derived
CC agonists, antagonists, inhibitors or compounds are used as an
CC improvement, elimination or substitution of an existing taste and/or a
CC fragrance of (or in) the food and/or cosmetic products. They can also be
CC used in the preparation of medicament in the treatment and/or prevention
CC of a mammalian disorder, such as cell migration, sterility, psychotic and
CC neurological disorders, including anxiety, schizophrenia, manic
CC depression, depression, for promoting axonal growth, nerve cell
CC connection and nerve regeneration for modulating male and female
CC endocrine functions, hormone production and the menstrual cycle, for the
CC prevention or the treatment by stimulation of several mammalian
CC behaviours, such as stimulation or suppression of appetite, sexual
CC motivation, sexual attraction, aggression and for promoting or
CC suppressing chemical communication between organisms. The present
CC sequence is a human DNA encoding an olfactory and pheromone GPCR
XX
SQ Sequence 966 BP; 182 A; 276 C; 217 G; 291 T; 0 U; 0 Other;

Query Match 96.9%; Score 956.6; DB 6; Length 966;
Best Local Similarity 99.6%; Pred. No. 4.1e-300;
Matches 959; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

```
Qy         25 ATGGAATCTCCTCATCACACTGATGTTGACCCTTCTGTCTTCTTCCTCCTGGGCATCCCA 84
              |||||||||||| |||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ATGGAATCTCCTAATCACACTGATGTTGACCCTTCTGTCTTCTTCCTCCTGGGCATCCCA 60

Qy         85 GGTCTGGAACAATTTCATTTGTGGCTCTCACTCCCTGTGTGTGGCTTAGGCACAGCCACA 144
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 GGTCTGGAACAATTTCATTTGTGGCTCTCACTCCCTGTGTGTGGCTTAGGCACAGCCACA 120

Qy        145 ATTGTGGGCAATATAACTATTCTGGTTGTTGTTGCCACTGAACCAGTCTTGCACAAGCCT 204
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ATTGTGGGCAATATAACTATTCTGGTTGTTGTTGCCACTGAACCAGTCTTGCACAAGCCT 180

Qy        205 GTGTACCTTTTTCTGTGCATGCTCTCAACCATCGACTTGGCTGCCTCTGTCTCCACAGTT 264
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 GTGTACCTTTTTCTGTGCATGCTCTCAACCATCGACTTGGCTGCCTCTGTCTCCACAGTT 240

Qy        265 CCCAAGCTACTGGCTATCTTCTGGTGTGGAGCCGGACATATATCTGCCTCTGCCTGCCTG 324
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 CCCAAGCTACTGGCTATCTTCTGGTGTGGAGCCGGACATATATCTGCCTCTGCCTGCCTG 300

Qy        325 GCACATATGTTCTTCATTCATGCCTTCTGCATGATGGAGTCCACTGTGCTACTGGCCATG 384
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 GCACAGATGTTCTTCATTCATGCCTTCTGCATGATGGAGTCCACTGTGCTACTGGCCATG 360

Qy        385 GCCTTTGATCGCTACGTGGCCATCTGCCACCCACTCCGCTATGCCACAATCCTCACTGAC 444
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 GCCTTTGATCGCTACGTGGCCATCTGCCACCCACTCCGCTATGCCACAATCCTCACTGAC 420

Qy        445 ACCATCATTGCCCACATAGGGGTGGCAGCTGTAGTGCGAGGCTCCCTGCTCATGCTCCCA 504
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 ACCATCATTGCCCACATAGGGGTGGCAGCTGTAGTGCGAGGCTCCCTGCTCATGCTCCCA 480

Qy        505 TGTCCCTTCTTTATTGGGCGTTTGAACTTCTGCCAAAGCCATGTGATCCTACACACGTAC 564
              |||||||| |||||||||||||||||||||||||||||||||||||||||||||||||||
Db        481 TGTCCCTTCCTTATTGGGCGTTTGAACTTCTGCCAAAGCCATGTGATCCTACACACGTAC 540

Qy        565 TGTGAGCACATGGCTGTGGTGAAGCTGGCCTGTGGAGACACCAGGCCTAACCGTGTGTAT 624
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        541 TGTGAGCACATGGCTGTGGTGAAGCTGGCCTGTGGAGACACCAGGCCTAACCGTGTGTAT 600

Qy        625 GGGCTGACAGCTGCACTGTTGGTCATTGGGGTTGACTTGTTTTGCATTGGTCTCTCCTAT 684
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        601 GGGCTGACAGCTGCACTGTTGGTCATTGGGGTTGACTTGTTTTGCATTGGTCTCTCCTAT 660

Qy        685 GCCCTAATTGCACAAGCTGTCCTTCGCCTCTCATCCCATGAAGCTCGGTCCAAGGCCCTA 744
              |||||| ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        661 GCCCTAAGTGCACAAGCTGTCCTTCGCCTCTCATCCCATGAAGCTCGGTCCAAGGCCCTA 720

Qy        745 GGGACCTGTGGTTCCCATGTCTGTGTCATCCTCATCTCTTATACACCAGCCCTCTTCTCC 804
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        721 GGGACCTGTGGTTCCCATGTCTGTGTCATCCTCATCTCTTATACACCAGCCCTCTTCTCC 780

Qy        805 TTTTTTACACACCGCTTTGGCCATCACGTTCCAGTCCATATTCACATTCTTTTGGCCAAT 864
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        781 TTTTTTACACACCGCTTTGGCCATCACGTTCCAGTCCATATTCACATTCTTTTGGCCAAT 840

Qy        865 GTTTATCTGCTTTTGCCACCTGCTCTTAATCCTGTGGTATATGGAGTTAAGACCAAACAG 924
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        841 GTTTATCTGCTTTTGCCACCTGCTCTTAATCCTGTGGTATATGGAGTTAAGACCAAACAG 900

Qy        925 ATCCGTAAAAGAGTTGTCAGGGTGTTTCAAAGTGGGCAGGGAATGGGCATCAAGGCATCT 984
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        901 ATCCGTAAAAGAGTTGTCAGGGTGTTTCAAAGTGGGCAGGGAATGGGCATCAAGGCATCT 960

Qy        985 GAG 987
              |||
Db        961 GAG 963
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